December 3, 2012 FINAL

Ironbound/Passaic River Data

The Passaic River has a long history of industrialization, which has resulted in degraded water quality, sediment contamination, loss of wetlands and abandoned or underutilized properties along the shore. The lower Passaic River is considered part of the Diamond Alkali Superfund site, which is a source of dioxin contamination to the river.

Residences and commercial buildings near the Passaic River were impacted by flood waters during Hurricane Sandy. On November 17, 2012 EPA obtained four samples of flood water from three residences adjacent to the river, in the Ironbound section of Newark, NJ. The samples from two of the residences were collected on or about October 29, 2012 by the residents themselves and given by them to EPA; the sample from the third residence was collected by EPA personnel on November 17, 2012. On November 19, 2012 one further sample was taken from the Passaic River itself. A total of five samples, including a duplicate sample taken as a quality control, were collected for analysis.

The samples were analyzed for bacteria and 189 different chemicals, including Metals, Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs), Gasoline Range Organics (GROs), Diesel Range Organics (DROs), Total Petroleum Hydrocarbons (TPH), and Dioxins/Furans. Due to insufficient sample volume, only bacterial analyses were performed on two of the three residential samples.

Levels of bacteria were high. While this type of bacteria becomes inactive over time, these findings reinforce the need for people to protect themselves when cleaning up flood waters. Fact sheets detailing precautions that should be taken when cleaning flood waters can be found at http://www.epa.gov/sandy/.

Additional chemicals that were tested were either not detected, or were below levels of concern, with the exception of arsenic, iron, and lead. Arsenic and iron slightly exceeded drinking water standards, while concentrations of lead were about 20 times higher than the drinking water standard. Drinking water standards are established to protect people drinking two liters of water daily for 70 years. Because people were not drinking the floodwater, and had minimal contact with it for only a limited time, EPA does not consider these levels to be cause for concern.

Concentrations of chemicals in the Passaic River were all below drinking water standards. For more details, visit http://www.epa.gov/region2/passaicriver/